

Annex 1.



Republic of Namibia

Ministry of Agriculture, Water and Rural Development



Directorate of Veterinary Services

Purposes, Structure & Functions



Directorate Veterinary Services
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**Directorate of Veterinary Services
(DVS)**

A. Relative position within the Namibian context

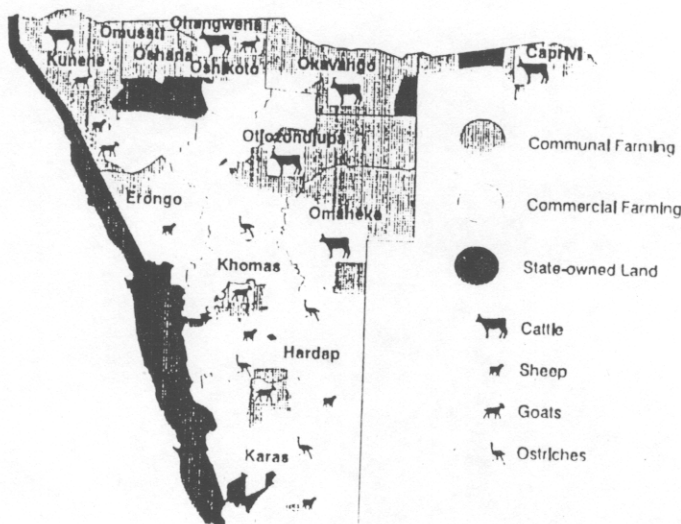
1. Agriculture in Namibia

a. Climate

Namibia is mostly arid to semi-arid, and tropical in the far northeast, with an average annual rainfall ranging from 0.2mm in the Namib desert, to 350mm in Windhoek, to 700mm in Katima Mulilo, with a national average annual rainfall of 270mm. The mean temperature in the interior is 20-25°C (68-77°F), and 15-20°C (40-68°F) along the coast. The sun shines almost every day.

b. Surface area

Namibia covers a surface of 824269 km² (318 251 sqm), of which some 567 200 ha (1,4 million acres) are arable and economically viable for horticulture. About 15% are state-owned land (nature parks, restricted land, etc.), leaving ca. 700 000 km² (270 000sqm) of range land available for animal production. This is divided into two segments: the commercial sector comprising 4200 farms over an area of about 28.7 ha (average 6800ha (16800 acres) per commercial ranch), and the communal areas, on which approximately 120000 farmers occupy about 30,8m ha.



c. Population

The official population figure stood at 1,4 million in 1991, recent projections 1999 at 1,8 million (central statistics office, next official census will be in 2001), of which about 26% are urbanised. The average population density thus is 1,7 km². Supporting 70% of the population directly or indirectly, agriculture is the largest employer; for the majority, this is at a subsistence level.

d. Production output

During 1997 the total output from the agricultural sector (at current prices) amounted to N\$ 1,230.1 million - a reduction of 14 per cent from the figure in the previous year. Of the total, N\$ 911.4 million originated from the private-tenure farming sub-sector and the remainder (26 per cent) from the communal-tenure areas.

The proportion of the total output of the private-tenure farming sub-sector provided by each of the main farming enterprises was as follows:

Cattle:	43.2%
Smallstock:	19.8%
Pigs:	0.4%
Karakul pelts/wool:	0.8%
Dairy(milk):	3.2%
Grain crops:	2.5%
Grapes:	4.3%
Other ¹ :	25.7%

¹ This comprises: "own construction", mohair, hides, skins and ostriches and poultry products.

2. Livestock Statistics

Year	cattle	sheep	goats	pigs	poultry	horses	donkeys	ostriches	dogs
1994	2.0m	2.6m	1.6m	17843	473310	58801	169807	23220	69750
1995	2.0m	2.4m	1.6m	19979	487031	57886	169047	21241	76107
1996	1.9m	2.1m	1.7m	18923	458158	56988	169678	38891	74502
1997	2.0m	2.4m	1.8m	16884	522618	57099	166296	46725	76176
1998	2.1m	2.0m	1.7m	14706	403937	53325	162973	52393	79014

3. Historical Perspective on the official Veterinary Services

The first veterinarians arrived on Namibian soil in 1894 under the German colonial regime. After the conquest by South African forces during World War I, a Division of Veterinary Services of the Administration of South West Africa was established under South African mandate.

This Division functioned independently until April 1969, when it was placed under the control of Veterinary Services of the Republic of South Africa.

Control subsequently reverted back to the government of SWA/Namibia in 1980.

In the independent Republic of Namibia (1990), the Directorate of Veterinary Services (DVS) falls under the Ministry of Agriculture, Water and Rural Development.

4. The Veterinary Profession in Namibia

With the establishment of a professional statutory registering body, the Namibian Veterinary Council, to regulate professional veterinary matters, the responsibility of veterinary care in the country was placed firmly within the hands of Namibian veterinarians. Veterinarians wishing to practise their profession in Namibia, whether privately or in the DVS, must first comply with all the requirements laid down by the Namibian Veterinary Council.

Graduates from the Universities of Harare and Pretoria are granted unconditional registration upon application, while graduates from all other universities are obliged to sit a registering examination held annually, before being considered for unconditional registration.

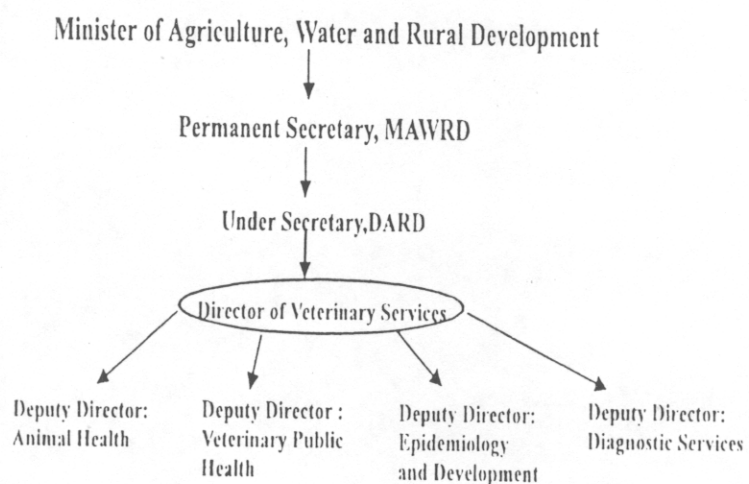
The annual Congress of the Veterinary Association of Namibia (VAN) provides a limited scope of continuing education, augmented by mini-congresses from time to time. VAN is an independent body that serves to support the veterinary fraternity, promotes social interaction and generally seeks to promote the profession's interests. Although VAN membership is not obligatory, virtually all registered veterinarians are also VAN members.

B. Purpose of the DVS

Succinctly stated, the aims of the Directorate of Veterinary Services (DVS) are to maintain and promote animal health, production and reproduction, and to assure safe and orderly marketing of animals and animal products through animal disease control, veterinary surveillance, epidemiology and extension, diagnostic services and veterinarians public health services.

C. Structure and functions of the DVS

1. Organogram



2. Personnel

The directorate is led by a Director, with four deputy directors to assist him, all of whom are qualified and registered veterinarians. Each deputy director heads one section as outlined below (this structure will be revised as soon as the new post structure is approved it is thus pending):

a. Sheep areas and Hygiene Services

- 16 Veterinarians
- 6 Chief Animal Health Inspectors
- 27 Animal Health Inspectors
- 10 Clerical Assistants
- 2 Chief Veterinary Hygiene Inspectors

14 Veterinary Hygiene Inspectors
53 Veterinary Hygiene assistants
1 Handyman
18 Workhand
3 Labourers
150 Subtotal

b. Cattle areas

14 Veterinarians
13 Chief Animal Health Inspectors
53 Animal Health Inspectors
124 Stock Inspection Assistants
71 Watchman
15 Clerical Assistants
15 Handyman
2 Leader Labourers
85 Labourers
8 Chief Workhand
25 Senior Workhand
53 Workhand
478 Subtotal

c. Epidemiology and Extension Services

2 Veterinarians
3 Technicians
1 Chief Control Clerk
3 Control Animal Health Inspectors
5 Clerical Assistants and Data Typists
14 Subtotal

d. Diagnostic Services

7 Veterinarians
3 Diagnostician
2 Chief Technician
19 Technicians
13 Technical Assistants
2 Clerical Assistants
1 Handyman
3 Labourers
16 Workhand
66 Subtotal
708 TOTAL

ii. Buffer Zone

The Northern Communal Areas (Opuwo, Ondangwa, Tsumkwe Area of Grootfontein and Rundu State Veterinary Districts) are referred to as Buffer Zone. Factors contributing to this classification include:

- * annual prophylactic vaccination against Foot-and-Mouth Disease (FMD);
- * proximity to high risk areas in neighbouring countries;
- * lack of infrastructure;
- * lack of animal identification; and
- * lack of movement control.

Routine animal disease control measures in this area include annual vaccinations in the form of organised vaccination campaigns (depending on the area, these may include Foot-and-Mouth Disease, Contagious Bovine Pleuropneumonia, Anthrax, Brucellosis and Rabies), monthly stock inspections by paraveterinary staff, and movement control involving movements between State Veterinary Districts. Although veterinarians attempt to render a clinical service, this is secondary to their primary function of animal disease control, and is often hampered by, amongst others, poor infrastructure, long distances and rather traditional farming practices. The double fenced corridor (VCF) serves as an effective barrier between the buffer - and surveillance zone.

iii. Surveillance Zone

This is the area bordering the Veterinary Cordon Fence towards the south, and has a width of at least two farms in the commercial farming areas in the State Veterinary Districts of Outjo, Otavi and Grootfontein, and also Gam communal area. The purpose of this area is to allow for the surveillance of FMD in the absence of vaccinations. This area is situated in the free zone and is subjected to additional disease control measures.

Disease control measures in the Surveillance Zone amount to three-monthly inspections, monitoring of compulsory annual vaccinations in the commercial areas or holding of vaccination campaigns in the communal areas, involving vaccinations against Anthrax, Brucellosis and Rabies (while no vaccination against FMD is permitted), and strict movement control enforced with a movement permit system. A permit is issued only if proof is available that all compulsory vaccinations have been carried out. Both FMD and CBPP are absent in this area. Disease treatment in the communal areas is hampered by the same factors above (distance, infrastructure). State veterinarians carry out a great amount of clinical work in addition to their primary function of animal disease control.

Marketing from this area is subject to three weeks quarantine prior to movement and the issuing of a so-called 'red cross movement permit', unless for direct slaughter at export abattoirs under veterinary control.

iv. Free Zone

This essentially comprises the commercial farming area south of the Surveillance Zone, but also includes all communal areas lying within the area (in Outjo & Omaruru (Damaraland & Otjimbingwe), Okahandja (Ovitoto), Windhoek (Rehoboth), Gobabis (Aminuis, Okakarara, Otjinene), and Keetmanshoop (Namaland, Bondelswarts & Hoachanas) State Veterinary Districts. The high level of vigilance to the north allows for a greatly reduced level of involvement in FMD control in this area, which amounts to annual stock inspections, and is coupled with vaccination monitoring against Anthrax, Brucellosis and Rabies (dogs), and movement control.

In some State Veterinary Districts in the commercial areas, much of the clinical work is done by veterinarians in private practice, and state veterinarians limit themselves to herd health measures like pregnancy diagnosis, testing for reproductive disease and export certification; in other districts there are no private veterinarians, and State Veterinarians carry out a great amount of clinical work in addition to their primary function of animal disease control.

Due to the high level of disease prevention, free marketing from this area is possible to most destinations.

d. Contagious Bovine Pleuropneumonia (CBPP)

The disease was introduced during 1859 but confined since 1919 in NCA areas except Caprivi. Annual vaccination is carried out but due to the endemic situation in Angola the disease could not be eradicated previously. A total embargo on movement of cattle across the VCF southwards are in force as well as to the CBPP-free Caprivi region. The VCF although initially erected for FMD control also plays a major part in preventing CBPP to spread to areas south of the VCF.

e. List A diseases occurring sporadically and stock owners themselves are responsible for prophylactic vaccination:

- Lumpy Skin Disease
- Rift Valley Fever
- Blue tongue
- African Horse Sickness

f. African Swine Fever (ASF)

The disease is considered to be endemic in warthogs. The central and north-central districts are proclaimed ASF-areas. In these areas pigs are kept in ASF-approved facilities.

g. Newcastle Disease(NCD)

The disease is smouldering in rural chickens. The highly sophisticated commercial ostrich farming industry is keeping birds in approved ostrich holdings to qualify for exportation of genetic material or meat.

II. Veterinary Cordon Fence

The purpose of the Veterinary Cordon Fence is to prevent cloven-hoofed animals, or products thereof, from unauthorized movement from the Buffer Zone to the Surveillance + Free zone, which is essential in preventing the spreading of animal diseases, like FMD and CBPP, from one area to another. As cloven-hoofed game can carry or transmit FMD, the fence had to be made game proof. Gates in the fence are manned by Veterinary Gate Guards.

i. Trans-Veterinary Cordon Fence Marketing

Since independence, DVS has played a major role in reducing the negative economical impact of the fence on the stock owners in the Northern Communal Areas by erecting the following quarantine facilities: Khowarib, palmfontein, Middelputz, Condor, Omutambo Maowe, Okongo, Oshivello, Mangetti and Katima/Kopano. This enables Northern Communal Area farmers to market their cattle for slaughter at Oshakati abattoir and Katima Mulilo at prices comparable to those fetched on the market south of the Veterinary Cordon Fence, by placing their animals in quarantine prior to slaughter. The meat derived from these animals is then marketed to the rest of Namibia and the RSA, in the form of fresh, matured, deboned cuts. With respect to small stock, these may be taken southwards across the Veterinary Cordon Fence after 3 week period of quarantine and treatment with an appropriate acaricide. However, this is not possible for cattle while the threat of CBPP remains.

ii. Future Change

If the Buffer Zone in terms of FMD control can be moved northwards into southern Angola. This, however, would rely on effective disease control measures, as practised in this area in southern Angola. This in turn depends on peace and stability in Angola, an effective official Veterinary Services in Angola, and proper coordination between Angolan and Namibian Veterinary Officials.

Suspension of cross-border movements of livestock across the Angola-Namibian border (inherent in the present socio-economic conditions over the central region of the border). Present efforts are aimed at control rather than at suspension;

- * eradication of CBPP by vaccination according to the OIE pathway;
- * improved infrastructure in the Northern Communal Areas;
- * effective movement control and animal identification;

Clearly, this step requires a major input from many sources, and would need to be approved by Namibia's trading partners in animal products, lest trading contracts generating a large proportion of current foreign revenue be lost.

For further information refer to the booklet "The Veterinary Cordon Fence - past present and future".

4. State Veterinary Districts

The country is subdivided into 15 State Veterinary Districts, with one to three State Veterinarians responsible for the total disease control in each area.

Sheep areas: Keetmanshoop, Mariental, Windhoek, Omaruru and Walvisbay.

Cattle Areas: Gobabis, Okahandja, Otjiwarongo, Outjo, Otavi, Grootfontein, Opuwo, Ondangwa, Rundu, Katima Mulilo.

Working under the State Veterinarian, in each district there are one to three Chief Animal Health Inspectors (CAHI), who are responsible for the supervision of the districts personnel and generally assisting the State Veterinarian in the planning and practical execution of tasks necessary for disease control, like inspection schedules and vaccination campaigns. Each State Veterinary District is further subdivided into Inspection Areas, with an Animal Health Inspector (AHI) responsible for the stock inspections, vaccination monitoring residue control, data capture, extension and movement control in each of these areas.

In the Northern Communal Areas, the Animal Health Inspectors are assisted in the practical execution of their tasks by Stock Inspection Assistants (SIA); each inspection area is again divided into SIA areas, where a Stock Inspection Assistant carries out the monthly inspections under the supervision of his AHI, assists in collecting epidemiological data, and spreads relevant extension messages. This is now in the process of phasing out, +/- 126 Stock Inspection Assistants for +/- 35 Animal Health Inspectors. Animal health Inspectors are required to have a Diploma training from any recognised institution i.e. 3 years post grade XII (still pending).

Vaccination campaigns in the communal areas are mostly a team effort of the whole office.

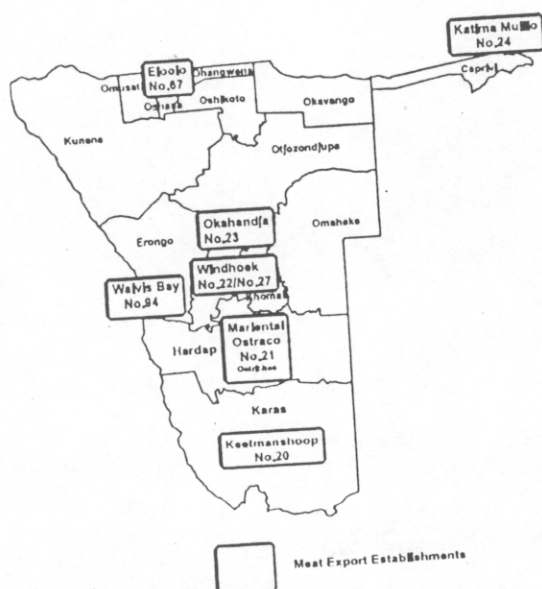
5. Meat Hygiene Services

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As Namibia is an exporting country of various animals and animal products (meat, ostriches, game trophies, hides, skins etc.), veterinary certification by competent state veterinarians is indispensable. At each abattoir (Windhoek, Okahandja, Oshakati, Katima Mulilo, Mariental, Keetmanshoop) one veterinarian is responsible for hygiene control during and after slaughter and processing, for antemortem and postmortem inspections of animal, and for export control of the finished product. He is assisted by Veterinary Hygiene Inspectors and Veterinary Hygiene Inspection Assistants, who carry out a large part of the meat hygiene control and practical inspection work under his supervision. Veterinary Hygiene Inspectors have a three-year diploma in Health or Meat Inspection, obtained in full-time study, while Veterinary Hygiene Inspection Assistants are trained by officials of the directorate over a period of 6 months, thus completing a certificate course under the auspices of UNAM.

During the annual game harvesting season, slaughter of game is monitored by DVS officials.

The function for hygiene certification of fresh fish and fish products is anticipated in near future.



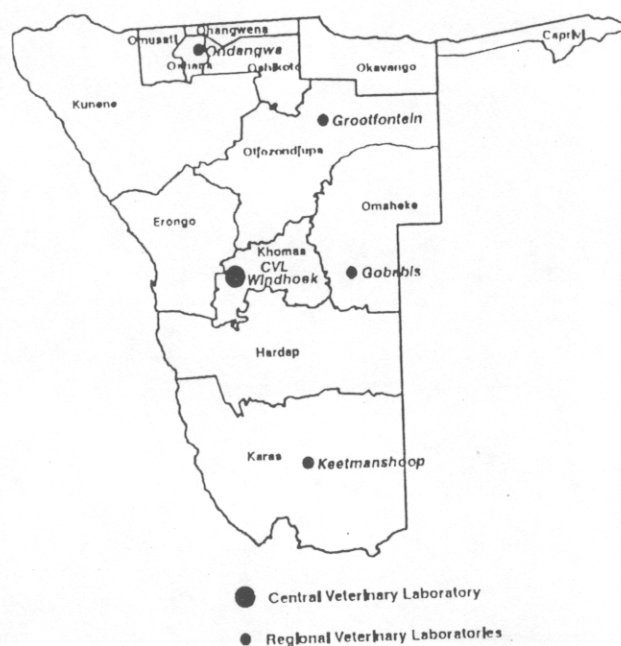
6. Epidemiological Services

Epidemiology: Epidemiological data is gathered from the laboratories, the export abattoirs and from all field services concerning stock numbers, disease incidence and various other aspects on data collection forms filled in by veterinarians and animal health auxiliaries, and is stored in a central computerised data bank in Windhoek. Here, epidemiological trends are analysed, and passed on to veterinarians, to be disseminated to the AHl and farmers. The Epidemiology Section also provides an information service for specific enquiries that veterinarians may have concerning epidemiological information.

Import control: A Veterinary import permit is required for the importation of all animals/animal products into Namibia except for animals/products to be quarantined, it is the task of customs officials to exercise control at ports of entry.

7. Diagnostic services

The professional veterinary staff of the Central Veterinary Laboratory in Windhoek provides an essential back-up service to field diagnosticians, by testing a wide variety of samples for signs of disease conditions, with the help of sophisticated laboratory equipment. The Central Veterinary Laboratory's services are augmented by the smaller Regional Veterinary Laboratories in Gobabis, Grootfontein and Ondangwa. The Central Veterinary Laboratory is also responsible for some residue testing on meat intended for export.



8. Veterinary Research and Quarantine

Problem oriented veterinary research is undertaken as required, either on affected farms or at Bergvlug Quarantine Farm east of Windhoek.

A quarantine station for the importation of horses and cattle is situated in Walvis Bay. Another quarantine station for large animals, game, pets and exotic birds is situated at Bergvlug near Windhoek.

9. Other

Tsetse fly control employing targets and fly traps is carried out in parts of the east Caprivi.

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